



PTO/SB/21 (09-04)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

13

Application Number

10/669,177

Filing Date

09-23-2003

First Named Inventor

Ba-Zhong Shen

Art Unit

2133

Examiner Name

DILDINE JR, R STEPHEN

Attorney Docket Number

BP3036.1

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	2. Request to apply previously paid issue fee, publication fee, and advance copy fee (1 page)
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	3. Copy of 2nd Notice of Allowance (8 pages)
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	Remarks	

The following are being submitted herewith:
4. Copy of previously submitted and USPTO-stamped Issue fee transmittal PTOL-85 previous issue fee, publication fee, and advance copy fee payments (1 page)
5. Issue fee transmittal PTOL-85 (Rev. 07/06) - PART B - FEE(S) TRANSMITTAL (1 page)
6. Fee address indication form - Form PTO/SB/47 (04-05) (1 page)
7. return postcard

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Garlick Harrison & Markison (USPTO CN 51472)		
Signature	/SXShort/ Reg. No. 45,105		
Printed name	Shayne X. Short, Ph.D. (Reg. No. 45,105)		
Date	03-20-2007	Reg. No.	45,105

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Barbara A. Adkins	Date	03-20-2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application Serial No: 10/669,177	Attorney Docket No: BP3036.1
Application Filing Date: 09-23-2003	Inventor(s): Ba-Zhong Shen, Hau Thien Tran, and Kelly Brian Cameron
Examiner: Dildine Jr., R. Stephen	
Art Group: 2133	Patent No: n/a
Confirmation No: 4091	Patent Issue Date: n/a
Title: Iterative metric updating when decoding LDPC (Low Density Parity Check) coded signals and LDPC coded modulation signals	

Date: 03-20-2007

Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**REQUEST TO APPLY PREVIOUSLY PAID ISSUE FEE AND
PUBLICATION FEE**

The Applicant hereby respectfully requests that the Examiner apply the previously paid issue fee and publication fee.

The Applicant is submitting herewith a copy of the previously submitted PTOL-85 form (which was stamped by the OIPE on 12-27-2006) that verifies the previous payment of the issue fee (\$1400.00), the publication fee (\$300.00), and the advance copy fees (\$6.00) for a total of **\$1706.00**.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present U.S. utility patent application.

RESPECTFULLY SUBMITTED,

By: /SXShort/ Reg. No. 45,105
Shayne X. Short, Ph.D., Reg. No. 45,105
Direct Phone: (512) 825-1145
Direct Fax No. (512) 394-9006

GARLICK HARRISON & MARKISON
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AUSTIN, TEXAS 78716-0727

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Notice of Allowability

Application No.

10/669,177

Examiner

R. Stephen Dildine

Applicant(s)

SHEN ET AL.

Art Unit

2133

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 16 January 2007.
2. ☒ The allowed claim(s) is/are 1-31.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 16 January 2007
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Art Unit: 2133

The information disclosure statement filed 16 January 2007 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. However, see the PTO-892, which forms a part of this action wherein this reference is cited to make of record that it has been considered.

Claims 1-31 are allowed.

The following is an examiner's statement of reasons for allowance: The reference by Wheatley discloses a system which uses a $\frac{1}{2}$ rate, constraint length 5 convolutional code (2.5.1, page 7) which is decoded by means of a Viterbi decoder (3.1, page 14). This is distinct from applicants' claimed invention which uses a low density parity check (LDPC) code which is decoded by the use of message passing between check nodes and bit nodes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2133


Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Stephen Dildine whose telephone number is (571) 272-3820. The examiner can normally be reached on M - F 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R. Stephen Dildine
Primary Examiner
Art Unit 2133

R. Stephen Dildine


R. STEPHEN DILDINE
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

MAR 23 2007

Substitute for form 1418/PTO

(Use as many sheets as necessary)

Sheet	1	of	1
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Application Number 10/669,177

Filing Date	09-23-2003
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First Named Inventor	Ba-Zhong Shen
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Art Unit	2133
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Examiner Name	DILDINE JR, R STEPHE
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Attorney Docket Number	DP3030.1
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Complete if Known

FAX RECEIVED

JAN 16 2007

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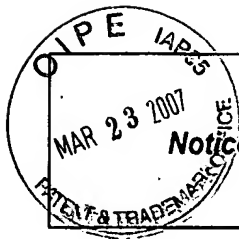
[illegible]

Examiner Signature	/R Stephen Dildine/	Date Considered	01/24/2007
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.93. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Consideration is governed by 38 U.S.C. 422 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the form should be sent to the USPTO. To complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Notice of References Cited

Application/Control No.

10/669,177

Applicant(s)/Patent Under
Reexamination
SHEN ET AL.

Examiner

R. Stephen Dildine

Art Unit

2133

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)			
	U	Wheatly, Moe, WinPSK Technical Reference Manual; Pages 1-47; URL: http://www.ise.canberra.edu.au/un5354/modem/winpsktech10.pdf			
	V				
	W				
	X				

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.